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# Radio-frequency Mössbauer spectra of the "easy"-plane type magnetic system (FeBO3)

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## Abstract

The theory of formation of the RF Mössbauer spectra for the "easy"-plane type magnetics (FeBO3) and for various types of RF field polarization is presented. Experiments using both linearly and circularly polarized external RF fields were carried out at different temperatures. At room temperature the experimental spectra for both cases are well described by switching hyperfine (hf) field model. At temperatures close to the Neel temperature (335 K), the spectra in the oscillating and rotating RF field were obtained and their forms are described by models of switching and rotating hf field, respectively. © 2006 Springer Science+Business Media, Inc.

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## Keywords

Gamma-optics, Magnetic materials, Mössbauer spectroscopy